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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,873	10/08/2003	Mark D. MacLean	NOR-038	7381

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EXAMINER	
NGUYEN, QUYNH H	

ART UNIT	PAPER NUMBER
2614	

MAIL DATE	DELIVERY MODE
09/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/681,873	MACLEAN ET AL.	
	Examiner	Art Unit	
	QUYNH H. NGUYEN	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *remarks filed 7/21/08*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

2. Applicant's amendment filed 7/21/08 has been entered.

Claim Rejections - 35 USC § 102

3. Claims 1, 3-5, 8-11, 13-15, 18-21, 23-25, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Jannson et al. (2003/0081287).

As to claims 1, 11, and 20, Jannson et al. teaches the steps of:

a plurality of mappers ([0044] and [0050]) for mapping packet traffic to electrical streams ([0025] - [0026]); and

a host network interface for receiving packet traffic from a packet-switched network (Fig. 5), the host network interface including a packet switch forwarding the first portion of the packet traffic to a first one of the mappers (*mapping processors*) mapping the first portion of the packet traffic into a first electrical stream targeted to a first destination on an optical transport network and the second one of the mappers mapping the second portion of the packet traffic into a second electrical stream targeted to a second destination (Fig. 4, *output fibers 470*) on the optical transport network (Fig. 4; paragraphs [0025] - [0026]).

As to claims 3, 13, and 23-24, Jannson et al. teaches an optical interface operating at a bandwidth for transporting optical signals onto the optical transport network, the bandwidth being apportioned between the electrical streams (paragraph [0007], [0158]).

As to claims 4, 14, and 25, Jannson et al. teaches each mappers included LCAS and VCAT technologies for dynamically controlling the bandwidth allocated to the stream produced by that mapper (paragraph [0009]).

As to claims 5 and 15, Jannson et al. teaches the packet traffic is Gigabit Ethernet traffic ([0006]).

As to claims 8-9, 18-19, and 28-29, Jannson et al. teaches the packet switch uses MPLS to determine to which of the mappers to forward a packet (paragraph [0009]).

As to claim 10, Jannson et al. teaches the destinations are one of: a different network elements connected to the optical transport network, different interfaces of the same network element connected to the optical transport network, and the same interface of the same network element (Fig. 4).

As to claim 21, Jannson et al. teach responding by the optical network element to an address resolution protocol request on behalf of a node in a packet-switched network (paragraphs [0005] - [0008]).

4. Claims 6, 16, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jannson et al. (2003/0081287) in view of Hernandez-Valencia et al. (6,993,046).

As to claims 6, 16, and 26, Jannson does not teach each mapper uses a Generic Framing Procedure to map packets to a separate electrical stream.

Hernandez-Valencia et al. teaches each mapper uses a Generic Framing Procedure to map packets to a separate electrical stream (col. 4, line 67 through col. 5, line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Hernandez-Valencia into the teachings of Jannson in order to have a more efficient system and supporting fiber channel application.

5. Claims 2, 7, 12, 17, 22, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jannson in view of Dravida et al. (US Patent 7,072,360).

As to claims 2 and 12, Jannson does not teach the packet switch includes an address resolution protocol (ARP) cache.

Dravida et al. teaches the packet switch includes an address resolution protocol (ARP) cache (col. 48, lines 29-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Dravida into the teachings of Jannson for the purpose of having a more efficient system and better mapping.

As to claims 7, 17, and 27, Dravida et al. teaches the packet switch uses virtual local area network (VLAN) tags to determine to which mappers to forward a packet (col. 26, lines 47-64; col. 27, lines 61-67).

As to claim 22, Dravida et al. teaches the method of claim 20 further comprising caching MAC addresses and IP addresses at the optical network element (col. 9, lines 4-30).

Response to Arguments

6. Applicant's arguments filed 7/21/08 have been fully considered but they are not persuasive.

Applicant argues that Jannson fails to teach "plurality of mappers". Examiner respectfully disagrees. Jannson teaches memory processor 440 includes processors 100, 200, and 300 (Fig. 4 and [0050]); and processor 100 is a data mapping processor ([0044]) and similarly to processors 200 and 300. Hence, Jannson teaches plurality of mappers.

Conclusion

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUYNH H. NGUYEN whose telephone number is 571-272-7489. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Quynh H Nguyen/
Primary Examiner, Art Unit 2614